

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a system having a bus and a system controller connected to the bus, said bus having a plurality of fixed ports, each of said ports capable of connecting a router card to the system controller, a method of sending a file from the system controller to a router card connected at a fixed port, said fixed port having a port address, the method comprising:

receiving a request packet at the system controller from the router card, said request packet including a file type and the port address;

~~identifying the file from~~ determining a file at the system controller to retrieve based on the file type and ~~the~~ port address from said request packet;

retrieving the file;

transmitting a size and name of the file from the system controller to the router card; and

sending one or more data packets comprising the file from the system controller to the router card.

2. (Previously Presented) The method of claim 1, wherein such sending further comprises:

forming one or more data packets from the file, one or more of said data packets being of a fixed size and including a system frame header and a data packet protocol header;

transmitting a data packet to the router card;

re-transmitting the data packet to the router card if the system controller does not receive a proper acknowledgment packet from the router card; and

transmitting the next data packet to the router card if the system controller receives a proper acknowledgment packet from the router card.

3. (Previously Presented) The method of claim 2, further comprising:
forming a last data packet having a size less than said fixed size; and
transmitting the last data packet to the router card.
4. (Original) The method of claim 3, further comprising:
re-transmitting a data packet to the router card if, after transmitting the data packet, the system controller receives a duplicate acknowledgment packet for the previous packet.
5. (Canceled)
6. (Original) The method of claim 2, where the data packet protocol header consists essentially of an operation code, a block number, a file type and a checksum.
7. (Original) The method of claim 2, where the acknowledgment packet consists essentially of an system frame header, an acknowledgment code, and a block number.
8. (Original) The method of claim 2, where the system frame header specifies the addresses of the router card and the system controller and being less than or equal to 12 bytes in size.
9. (Canceled)

10. (Original) The method of claim 7, where the system frame header specifies the addresses of the router card and the system controller and being less than or equal to 12 bytes in size.
11. (Original) The method of claim 1, where the request packet includes a system frame header and a request code, said system frame header including the address of the system controller and the port address of the router card and being less than or equal to 12 bytes in size.
12. (Original) The method of claim 2, where the request packet includes a system frame header and a request code, said system frame header including the address of the system controller and being less than or equal to 12 bytes in size.
13. (Original) The method of claim 1, further comprising:
powering the router card off initially; and
powering the router card on.
14. (Original) The method of claim 2, further comprising:
powering the router card off initially; and
powering the router card on.
15. (Original) The method of claim 12, further comprising:
powering the router card off initially; and
powering the router card on.

16. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions readable by the machine to perform a method in a system having a bus and a system controller connected to the bus, said bus having a plurality of fixed ports, each of said ports capable of connecting a router card to the system controller, a method of sending a file from the system controller to a router card connected at a fixed port, said fixed port having a port address, the method comprising:

receiving a request packet at the system controller from the router card, said request packet including a file type and the port address;

~~identifying the file from~~ determining a file at the system controller to retrieve based on the file type and ~~the~~ port address from said request packet;

retrieving the file;

transmitting a size and name of the file from the system controller to the router card; and

sending one or more data packets comprising the file from the system controller to the router card.

17. (Previously Presented) The program storage device of claim 16, where such sending comprises:

forming a data packet from the file, said data packet being of a fixed size and including a system frame header and a data packet protocol header;

transmitting the data packet to the router card;

re-transmitting the data packet to the router card if the system controller does not receive a proper acknowledgment packet from the router card; and

transmitting the next data packet to the router card if the system controller receives a proper acknowledgment packet from the router card.

Claims 18-36 (Canceled).

37. (Currently Amended) In a system having a bus and a system controller connected to the bus, said bus having a plurality of fixed ports, each of said ports capable of connecting a router card to the system controller, a method of receiving a file from the system controller by a router card connected at a fixed port, said fixed port having a port address, the method comprising:

 sending a request packet to the system controller upon power up of the router card, said request packet including a file type and the port address based on which the system controller determines a file to retrieve;

 receiving a file size and name for the file from the system controller;

 setting up a buffer of a size at least as large as said file size;

 receiving a data packet containing a portion of the file from the system controller;

 checking the data packet for correctness; and

 sending an acknowledgement for the data packet to the system controller if the data packet is correct.

38. (Canceled)

39. (Original) The method of claim 37, where the request packet consists essentially of a system frame header, a request code, and a file type.

40. (Original) The method of claim 37, where the data packet is of a fixed size and includes a system header and a data packet protocol header where the data packet protocol header consists essentially of an operation code, a block number, a file type, and a checksum.

41. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions readable by the machine to perform a method in a system having a bus and a system controller connected to the bus, said bus having a plurality of fixed ports, each of said ports capable of connecting a router card to the system controller, a method of receiving a file from the system controller by a router card connected at a fixed port, said fixed port having a port address, the method comprising:

 sending a request packet to the system controller upon power up of the router card, said request packet including a file type and the port address based on which the system controller determines a file to retrieve;

 receiving a file size and name for the file from the system controller;

 setting up a buffer of a size at least as large as said file size;

 receiving a data packet containing a portion of the file from the system controller;

 checking the data packet for correctness; and

 sending an acknowledgement for the data packet to the system controller if the data packet is correct.

42. (Original) The method of claim 41, where the request packet consists essentially of a system frame header, a request code, and a file type.

43. (Currently Amended) In a system having a bus and a system controller connected to the bus, said bus having a plurality of fixed ports, each of said ports capable of connecting a router card to the system controller, a method of managing an active router card and an inactive router card comprising:

sending a request packet from the active router card to the system controller upon power up of the active router card, said request packet including a file type of a file to be downloaded and the port address, said file type and port address from which the system controller determines said file to be downloaded;

receiving a file size and name of said file on the active router card from the system controller;

setting up a buffer of a size at least as large as said file size on the active router card;

receiving a first data packet containing a portion of the file on the active router card from the system controller;

checking the first data packet for correctness on the active router card;

sending an acknowledgement for the first data packet from the active router card to the system controller if the first data packet is correct;

detecting a failure of the active router card;

sending a request packet from the inactive router card to the system controller upon power up of the active router card, said request packet including a file type of a file to be downloaded and the port address;

receiving a file size and name of said file on the inactive router card;

setting up a buffer of a size at least as large as said file size on the inactive router card;

receiving a second data packet containing a portion of the file on the inactive router card from the system controller;

checking the second data packet for correctness on the inactive router card; and

sending an acknowledgement for the second data packet from the inactive router card to the system controller if the second data packet is correct.

44. (Previously Presented) The method of claim 43, where the request packet consists essentially of a system frame header, a request code, and a file type.

45. (Previously Presented) The method of claim 43, where the first data packet and the second data packet are of both of a fixed size and include a system header and a data packet protocol header wherein the data packet protocol header consists essentially of an operation code, a block number, a file type, and a checksum.

46. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions readable by the machine to perform a method for managing an active router card and in inactive router card in a system having a bus and a system controller connected to the bus, said bus having a plurality of fixed ports, each of said ports capable of connecting a router card to the system controller, the method comprising:

sending a request packet from the active router card to the system controller upon power up of the active router card, said request packet including a file type of a file to be downloaded and the port address, said file type and port address from which the system controller determines said file to be downloaded;

receiving a file size and name of said file on the active router card from the system controller;

setting up a buffer of a size at least as large as said file size on the active router card;

receiving a first data packet containing a portion of the file on the active router card from the system controller;

checking the first data packet for correctness on the active router card;

sending an acknowledgement for the first data packet from the active router card to the system controller if the first data packet is correct;

detecting a failure of the active router card;

sending a request packet from the inactive router card to the system controller upon power up of the active router card, said request packet including a file type of a file to be downloaded and the port address;

receiving a file size and name of said file on the inactive router card;

setting up a buffer of a size at least as large as said file size on the inactive router card;

receiving a second data packet containing a portion of the file on the inactive router card from the system controller;

checking the second data packet for correctness on the inactive router card; and

sending an acknowledgement for the second data packet from the inactive router card to the system controller if the second data packet is correct.

47. (Previously Presented) The program storage device of claim 46, where the request packet consists essentially of a system frame header, a request code, and a file type.

48. (Previously Presented) The program storage device of claim 46, where the first data packet and the second data packet are of both of a fixed size and include a system header and a data packet protocol header wherein the data packet protocol header consists essentially of an operation code, a block number, a file type, and a checksum.